RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/510,716_

Source: _PCT/10_

Date Processed by STIC: _7/12/05_

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RAW SEQUENCE LISTING   DATE: 07/12/2005
PATENT APPLICATION: US/10/510,716   TIME: 09:41:47

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 3 <110> APPLICANT: HAKAMADA, YOSHIHIRO
 4        OZAWA, TADAHIRO
 5        KOBAYASHI, TOORU
 7 <120> TITLE OF INVENTION: MUTATED ALKALINE CELLULASE
 9 <130> FILE REFERENCE: 260068US0PCT
11 <140> CURRENT APPLICATION NUMBER: 10/510,716
12 <141> CURRENT FILING DATE: 2004-10-18
14 <150> PRIOR APPLICATION NUMBER: PCT/JP03/05371
15 <151> PRIOR FILING DATE: 2003-04-25
17 <150> PRIOR APPLICATION NUMBER: JP 2002-124474
18 <151> PRIOR FILING DATE: 2002-04-25
20 <160> NUMBER OF SEQ ID NOS: 9
22 <170> SOFTWARE: PatentIn version 3.3
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 2475
26 <212> TYPE: DNA
27 <213> ORGANISM: Bacillus sp. KSM-S237
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41              20                  25                  30
43 aac act cgt gaa gac aat ttt aaa cat tta tta ggt aat gac aat gtt       144
44 Asn Thr Arg Glu Asp Asn Phe Lys His Leu Leu Gly Asn Asp Asn Val
45          35                  40                  45
47 aaa cgc cct tct gag gct ggc gca tta caa tta caa gaa gtc gat gga       192
48 Lys Arg Pro Ser Glu Ala Gly Ala Leu Gln Leu Gln Glu Val Asp Gly
49      50                  55                  60
51 caa atg aca tta gta gat caa cat gga gaa aaa att caa tta cgt gga       240
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53 65                  70                  75                  80
55 atg agt aca cac gga tta cag tgg ttt cct gag atc ttg aat gat aac       288
56 Met Ser Thr His Gly Leu Gln Trp Phe Pro Glu Ile Leu Asn Asp Asn
57                  85                  90                  95
59 gca tac aaa gct ctt tct aac gat tgg gat tcc aat atg att cgt ctt       336
60 Ala Tyr Lys Ala Leu Ser Asn Asp Trp Asp Ser Asn Met Ile Arg Leu
61              100                 105                 110
63 gct atg tat gta ggt gaa aat ggg tac gct aca aac cct gag tta atc       384
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68 Lys Gln Arg Val Ile Asp Gly Ile Glu Leu Ala Ile Glu Asn Asp Met
69         130                 135                 140
71 tat gtt att gtt gac tgg cat gtt cat gcg cca ggt gat cct aga gat      480
72 Tyr Val Ile Val Asp Trp His Val His Ala Pro Gly Asp Pro Arg Asp
73 145                 150                 155                 160
75 cct gtt tat gca ggt gct aaa gat ttc ttt aga gaa att gca gct tta      528
76 Pro Val Tyr Ala Gly Ala Lys Asp Phe Phe Arg Glu Ile Ala Ala Leu
77                 165                 170                 175
79 tac cct aat aat cca cac att att tat gag tta gcg aat gag ccg agt      576
80 Tyr Pro Asn Asn Pro His Ile Ile Tyr Glu Leu Ala Asn Glu Pro Ser
81             180                 185                 190
83 agt aat aat aat ggt gga gca ggg att ccg aat aac gaa gaa ggt tgg      624
84 Ser Asn Asn Asn Gly Gly Ala Gly Ile Pro Asn Asn Glu Glu Gly Trp
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87 aaa gcg gta aaa gaa tat gct gat cca att gta gaa atg tta cgt aaa      672
88 Lys Ala Val Lys Glu Tyr Ala Asp Pro Ile Val Glu Met Leu Arg Lys
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91 agc ggt aat gca gat gac aac att atc att gtt ggt agt cca aac tgg      720
92 Ser Gly Asn Ala Asp Asp Asn Ile Ile Ile Val Gly Ser Pro Asn Trp
93 225                 230                 235                 240
95 agt cag cgt ccg gac tta gca gct gat aat cca att gat gat cac cat      768
96 Ser Gln Arg Pro Asp Leu Ala Ala Asp Asn Pro Ile Asp Asp His His
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136 Tyr Thr Lys Val Leu Trp Asp Phe Asn Asp Gly Thr Lys Gln Gly Phe
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140 Gly Val Asn Ser Asp Ser Pro Asn Lys Glu Leu Ile Ala Val Asp Asn
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151 gga aaa agt gtt gat att tta ggt gct gag aag ctt aca atg gat gtt      1440
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193 625                    630                   635                   640
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203 aca gaa ggc gca atg aat atc aat tta gta ttc cag cca cct act aac      2064
204 Thr Glu Gly Ala Met Asn Ile Asn Leu Val Phe Gln Pro Pro Thr Asn
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216 Ile Asn Val Arg Asp Ile Thr Asn Ile Gln Asp Asp Thr Leu Leu Arg
217             725                 730                 735
219 aac atg atg atc att ttt gca gat gta gaa agt gac ttt gca ggg aga      2256
220 Asn Met Met Ile Ile Phe Ala Asp Val Glu Ser Asp Phe Ala Gly Arg
221             740                 745                 750
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228 Val Glu Pro Glu Pro Val Asp Pro Gly Glu Glu Thr Pro Pro Val Asp
229     770                 775                 780
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264     50                  55                  60
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272              85                  90                  95
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276             100                 105                 110
279 Ala Met Tyr Val Gly Glu Asn Gly Tyr Ala Thr Asn Pro Glu Leu Ile
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291 Pro Val Tyr Ala Gly Ala Lys Asp Phe Phe Arg Glu Ile Ala Ala Leu
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295 Tyr Pro Asn Asn Pro His Ile Ile Tyr Glu Leu Ala Asn Glu Pro Ser
296 .           180                 185                 190
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348 385             390                 395                 400
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VERIFICATION SUMMARY   DATE: 07/12/2005
PATENT APPLICATION: **US/10/510,716**   TIME: 09:41:48

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